Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please amend the claims as follows:

Listing of Claims:

1. (currently amended) A method for correcting the phase difference between ~~the~~ a pixel clock of a graphics card and ~~the~~ a sampling clock of a flat-panel display with an analog interface in a system ~~comprising~~ having a flat-panel display, a graphics card and a computer, ~~characterized in that~~ comprising:

determining an optimal phase difference between the pixel clock of the graphics card and the sampling clock of the flat panel display; and

performing an automatic adjustment of the optimal phase difference ~~is performed~~ repeatedly during continued operation of the display to compensate for phase drift during the continued operation of the display by providing an updated optimal phase difference.

2. (currently amended) [[A]] The method according to claim 1, ~~characterized in that~~ wherein the automatic adjustment of the phase difference is performed continuously.

3. (currently amended) [[A]] The method according to claim 1, ~~characterized in that~~ wherein the automatic adjustment of the phase difference is performed periodically.

4. (currently amended) The [[A]] method according to claim 1, ~~characterized in that~~ wherein ~~the~~ an optimal phase difference adjustment necessary for ~~the~~ an instantaneous condition

of the system during continued operation of the display is determined only at individual image spots, and ~~in that~~ the determined optimal phase difference adjustment is then applied to the entire display as the display displays images ~~image~~.

5. (currently amended) [[A]] The method according to claim 4, ~~characterized in that~~ wherein said automatic adjustment of the optimal phase difference comprises selecting a sufficiently bright image spot ~~is selected~~ and the rising edge of a video pulse of this image spot is determined, ~~in that a sufficiently bright image spot is selected and the rising edge of a video pulse of this image spot is determined,~~ and ~~in that~~ the optimal phase difference is adjusted such that ~~the~~ a sampling instant for ~~the~~ an entire image is situated approximately at the midpoint between ~~the~~ rising and falling edges of the video pulse.

6. (currently amended) [[A]] The method according to claim 4, ~~characterized in that~~ wherein said automatic adjustment of the optimal phase difference comprises determining ~~the~~ a rising edge of a video pulse of a sufficiently bright image spot ~~is determined,~~ and ~~in that~~ the optimal phase difference is adjusted such that ~~the~~ a sampling instant is shifted by approximately half the width of an image spot toward the center of ~~the~~ a pixel.

7. (currently amended) [[A]] The method according to claim 4, ~~characterized in that~~ wherein said automatic adjustment of the optimal phase difference comprises determining a ~~the~~ falling edge of ~~the~~ a video pulse ~~is determined~~ at a sufficiently bright image spot, and ~~in that~~ the optimal phase difference is adjusted such that ~~the~~ a sampling instant is shifted by approximately half the width of an image spot toward the center of ~~the~~ a pixel.

8. (currently amended) [[A]] The method according to claim 5, wherein ~~the~~ an image area and image spots are arrayed on the flat-panel display in rows and columns between a back-porch region and a front-porch region, wherein said automatic adjustment of the optimal phase difference comprises choosing ~~characterized in that~~ an image spot in ~~the~~ a first image column close to the back-porch region ~~is chosen~~ as the sufficiently bright image spot for determination of the rising edge and an image spot in the first image column close to the front-porch region is chosen as the sufficiently bright image spot for determination of the falling edge.

9. (currently amended) [[A]] The method according to claim *5*, ~~characterized in that~~ wherein said automatic adjustment of the optimal phase difference further comprises measuring the brightness of a plurality of image spots of the first or last image column ~~is measured~~, and choosing the image spots with the greatest brightness in the first or last image column ~~are chosen~~ for determination of the rising or falling edge respectively of the video pulse.

10. (currently amended) [[A]] The method according to claim 5, ~~characterized in that~~ wherein said automatic adjustment of the optimal phase difference further comprises measuring ~~the~~ image spots (n x k) are ~~first measured~~ with n = 1,2, ... N and k = constant, ~~such as 10,~~ and ~~in that~~, if no sufficiently bright image spot ~~was~~ is found, the image spots (n + m) x k are measured with m = 1, 2, ... N, until a sufficiently bright image spot is found.

11. (currently amended) [[A]] The method according to claim 5, ~~characterized in that,~~ wherein said automatic adjustment of the optimal phase difference further comprises for determination of the amplitude values of the selected image spots, shifting the phases at these image spots ~~are shifted~~ until the measured amplitude values no longer change significantly, and ~~in that~~ further processing the amplitude values ~~then~~ determined ~~are further processed~~.

12. (currently amended) [[A]] The method according to claim 5, ~~characterized in that~~ wherein said automatic adjustment of the optimal phase difference further comprises advancing the phase used for determination of ~~the~~ amplitude values ~~is advanced~~ sufficiently so that ~~the~~ measured amplitude values are smaller than a predetermined limit value~~, for example smaller than 50% of the amplitude value,~~ ~~in that~~ delaying the phase ~~is delayed~~ by half the width of a spot, and ~~in that~~ further processing the measured amplitude value ~~then measured is further processed~~.

13. (currently amended) [[A]] The method according to claim 5, ~~characterized in that,~~ wherein said automatic adjustment of the optimal phase difference further comprises for determination of the rising edge of the selected image spots, shifting the phase at the selected image spot ~~is shifted~~ sufficiently toward the back-porch region so that ~~the~~ a measured amplitude value is reduced to a predetermined percentage~~, for example 50%,~~ of ~~the~~ a previously determined amplitude value, and storing ~~in that~~ this value of the phase ~~is stored~~ temporarily as the position of the rising edge.

14. (currently amended) A method according to claim 5, ~~characterized in that,~~ wherein said automatic adjustment of the optimal phase difference further comprises for determination of the falling edge of the selected image spots, shifting the phase at the selected image spot ~~is shifted~~ sufficiently toward the front-porch region so that ~~the~~ a measured amplitude value is reduced to a predetermined percentage~~, for example 50%,~~ of ~~the~~ a previously determined amplitude value, and storing ~~in that~~ this value of the phase ~~is stored~~ temporarily as the position of the falling edge.

15. (currently amended) A method according to claim 5, ~~characterized in that~~ further comprising delaying the phase or sampling instant ~~is delayed~~ relative to the midpoint between the rising and falling edges by a predetermined amount~~, for example 10% of the width of the image spot~~.

16. (currently amended) A method according to claim 1, ~~characterized in that~~ further comprising masking ~~the~~ pixel or pixels that is or are influenced or distorted during determining the optimal phase difference ~~by matching is or are masked~~ by masking such pixel or pixels with distortion-free image fragments from a video memory.

17. (currently amended) [[A]] The method according to claim 15, ~~characterized in that~~ further comprising repeatedly regenerating a ~~the~~ video memory ~~is repeatedly regenerated, preferably with every second image~~.

18. (currently amended) [[A]] The method according to claim 4, ~~characterized in that~~ further comprising creating an offset wherein the sampling instant can be changed by ~~the~~ a user compared with the value determined during determining the optimal phase difference ~~matching,~~ in which case ~~an~~ said offset ~~adjusted in this way~~ is used ~~taken into consideration~~ during an automatic matching.

19. (currently amended) A device for correcting the phase difference between the pixel clock of a graphics card and the sampling clock of a flat-panel display with an analog interface in a system ~~comprising~~ having a flat-panel display, a graphics card and a computer, ~~characterized by~~ comprising:

a processor for repeatedly determining an optimal phase difference between a pixel clock of a graphics card and a sampling clock of a flat panel display; and

an adjusting circuit ~~a device by~~ which repeatedly performs an automatic adjustment of the optimal phase difference ~~is performed~~ ~~repeatedly~~ during the continued operation of the display to compensate for phase drift during the continued operation of the display and to provide an updated optimal phase difference.

20. (currently amended) [[A]] The device according to claim 19, ~~characterized by a device~~ wherein ~~by which~~ the automatic adjustment of the optimal phase difference is performed continuously or periodically.

21. (currently amended) [[A]] The device according to claim 19, ~~characterized by~~ wherein [[an]] the adjusting ~~device~~ circuit for ~~shifting~~ adjusting the phase, ~~comprising~~ further

comprises a circuit containing two PLL circuits, ~~whose~~ with outputs which can be adjusted independently of one another as regards their phase.

22. (currently amended) [[A]] The device according to claim 19, ~~characterized by~~ wherein ~~an~~ the adjusting ~~device~~ circuit for shifting the phase, further comprises ~~comprising~~ a PLL circuit with two clock outputs~~, whose~~ with output clock signals which can be adjusted independently of one another as regards their phase.

23. (currently amended) [[A]] The device according to claim 22, ~~characterized in that~~ wherein the two outputs of the PLL circuit ~~optionally~~ deliver a sampling clock signal for matching and a sampling signal for the entire image.

24. (currently amended) [[A]] The device according to claim 23, ~~characterized in that~~ wherein the sampling clock is delivered alternately by the two outputs of the PLL circuit.

25. (currently amended) [[A]] The device according to claim 19, ~~characterized by~~ wherein ~~a device by which the~~ the adjusting circuit is structured to make a phase adjustment necessary for the instantaneous condition of the system which is determined only at individual image spots, and by which the determined phase adjustment is then applied to the entire image.

26. (currently amended) [[A]] The device according to claim 19, ~~characterized by~~ wherein the adjusting circuit ~~a device which~~ determines the rising edge of a video pulse of a sufficiently bright image spot, ~~by a device that~~ determines the falling edge of the video pulse at a

sufficiently bright image spot, and ~~by an adjusting device with which~~ the phase is adjusted such that the sampling instant is located at approximately the midpoint between the rising and the falling edges of a video pulse.

27. (currently amended) [[A]] The device according to claim 19, ~~characterized by~~ wherein the adjusting circuit ~~a device which~~ determines the rising edge of a video pulse of a sufficiently bright image spot, and ~~by an adjusting device with which~~ the phase is adjusted such that the sampling instant is shifted by approximately half the width of an image spot toward the center of the pixel.

28. (currently amended) [[A]] The device according to claim 19, ~~characterized by~~ wherein the adjusting circuit ~~a device which~~ determines the falling edge of a video pulse at a sufficiently bright image spot, and ~~by an adjusting device with which~~ the phase is adjusted such that the sampling instant is shifted by approximately half the width of an image spot toward the center of the pixel.

29. (currently amended) [[A]] The device according to claim 26, ~~characterized by~~ wherein a PLL circuit which is programmed such that it oscillates at an integral multiple of the needed sampling frequency, and by a downstream frequency divider, which divides the sampling frequency of the PLL circuit by a factor n, wherein n sampling signals phase-shifted by 1/n periods relative to one another can be generated.

30. (currently amended)[[A]] The device according to claim 29, ~~characterized in that~~ wherein ~~the~~ a factor n = 2 is used and~~, when~~ wherein the phase difference of the PLL circuit is adjusted such that ~~the~~ one sampling signal is in phase with one edge of the pixel, and the other sampling signal is shifted by 1/2 pixel in its phase difference.

31. (currently amended) [[A]] The device according to claim 19, ~~characterized by a device~~ wherein the adjusting circuit for shifting the phase for determination of the sampling value of the image spot until the measured amplitude values no longer differ significantly, whereupon the sampling value determined then is further processed.

32. (currently amended) [[A]] The device according to claim 19, ~~characterized by a device~~ wherein the adjusting circuit ~~which~~ advances the phase used for determination of the sampling value sufficiently that the measured amplitude values are smaller than a predetermined limit value, such as smaller than 50% of the sampling value, and by a device which then retards the phase by half the width of an image spot, whereupon the sampling value measured then is further processed.

33. (currently amended) [[A]] The device according to claim 19, ~~characterized by a device~~ wherein the adjusting circuit ~~which~~ shifts the phase for determination of the rising edge sufficiently far toward ~~the~~ a back-porch region that the measured amplitude value decreases to a predetermined percentage, such as 50% of the previously determined amplitude value, whereupon this value of the phase is stored temporarily as the position of the rising edge.

34. (currently amended) [[A]] The device according to claim 19, ~~characterized by~~ wherein a device which shifts the phase for determination of the falling edge sufficiently far toward the front-porch region that the measured amplitude value decreases to a predetermined percentage~~, such as 50% of the previously determined amplitude value,~~ whereupon this value of the phase is stored temporarily as the position of the falling edge.

35. (currently amended) [[A]] The device according to claim 19, ~~characterized by an adjusting device,~~ wherein the adjusting circuit uses an offset by which the sampling instant can be changed by the user compared with the value determined during matching, in which case ~~an~~ said offset ~~adjusted in this way~~ is used ~~taken into consideration~~ during automatic matching.

36. (new) The method according to claim 1, wherein when performing an automatic adjustment of the optimal phase difference, the adjusted optimal phase difference may be unchanged from the immediately preceding one.

37. (new) A method for correcting the phase difference between a pixel clock of a graphics card and a sampling clock of a flat-panel display with an analog interface in a system having a flat-panel display, a graphics card and a computer, comprising:

determining an optimal phase difference between the pixel clock of the graphics card and the sampling clock of the flat panel display;

performing an automatic adjustment of the optimal phase difference repeatedly during continued operation of the display to compensate for phase drift during the continued operation of the display by providing an updated optimal phase difference based on which a sampling

instant for the entire image is situated approximately at a midpoint between the rising and falling edges of a video pulse.

38. (new) A method for correcting the phase difference between a pixel clock of a graphics card and a sampling clock of a flat-panel display with an analog interface in a system having a flat-panel display, a graphics card and a computer, comprising:

determining an optimal phase difference between the pixel clock of the graphics card and the sampling clock of the flat panel display;

performing an automatic adjustment of the optimal phase difference repeatedly during continued operation of the display to compensate for phase drift during the continued operation of the display by providing an updated optimal phase difference;

wherein the optimal phase difference adjustment necessary for an instantaneous condition of the system during continued operation of the display is determined only at individual image spots, and the determined optimal phase difference adjustment is then applied to the entire display as the display displays images; and

wherein the updated optimal phase difference is such that a sampling instant for the entire image is situated approximately at a midpoint between the rising and falling edges of a video pulse.